DOCUMENT RESUME

ED 072 416 CS 000 332

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TITLE A Study of the Experimentalist Beliefs and Open-Mindedness of Teachers of First Grade Reading.
PUB DATE Oct 72
NOTE 98p.; Master's Equivalency Thesis, Graduate School of Education, Rutgers University, The State University of New Jersey

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Basic Reading; Beginning Reading; *Dogmatism; *Educational Philosophy; Reading Programs; *Teacher Attitudes; Teachers
IDENTIFIERS *DISTAR Reading Program

ABSTRACT

This study investigates the degree to which the beliefs of teachers of the DISTAR reading program are the same as the beliefs of teachers of basal reader programs. The content of teacher beliefs is investigated in regard to the extent of agreement or disagreement with experimentalism. The structure of teacher beliefs is investigated in terms of the degree of open-mindedness of the teachers. Teacher educational beliefs, teacher philosophic beliefs, and the degree of open-mindedness of the two groups of teachers are compared on the basis of inventory scores on the Mann-Whitney U Test. The study finds no significant differences in educational beliefs, philcsophic beliefs, or open-mindedness between the two groups of teachers. A ranking of high, medium, and low scorers on the three inventories shows that there is a tendency for high scorers in philosophic beliefs, as opposed to high scorers in educational beliefs, to be more numerous in the experimentalist beliefs profiles. There is also a tendency for the DISTAR teachers in this study to score higher than basal reader teachers in educational beliefs and in their degree of open-mindedness. (Author/TO)

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ED 072416

A STUDY OF THE EXPERIMENTALIST BELIEFS AND OPEN-MINDEDNESS OF TEACHERS OF FIRST GRADE READING

A MASTER'S EQUIVALENCY THESIS

SUBMITTED TO THE FACULTY

OF THE

GRADUATE SCHOOL OF EDUCATION
(READING CURRICULUM)

OF

RUTGERS UNIVERSITY

THE STATE UNIVERSITY OF NEW JERSEY

BY

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IN PARTIAL FULFILLMENT OF

REQUIREMENTS TOWARDS THE

DEGREE OF

DOCTOR OF EDUCATION

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CHAPTER I

INTRODUCTION

Statement of the Problem

Is there a difference in educational beliefs and degree of open-mindedness between teachers using the DISTAR program and teachers using basal reader programs?

Background of the Study

The traditional reading program most used in schools is the basal reader program, while DISTAR (Direct Instructional System for Teaching Arithmetic and Reading) is a relatively new reading program. This study investigates the educational beliefs and degree of open-mindedness of DISTAR teachers and teachers of traditional basal reader programs. Several basal reader programs are included in the basal reader group. They are: The Ginn Basic Readers, the Chandler Reading Program, the Bank Street Readers and the Open Court Basic Readers.

Reading Programs and Beliefs

A set of educational beliefs is associated with any organized reading program. These educational beliefs are often set forth in the description and objectives of published programs. Educational beliefs are also stated in the methods and learning outcomes advocated by a program.

Behind these educational beliefs are underlying philosophical beliefs. The philosophical underpinnings of educational beliefs include such basic beliefs as the meaning of life, the nature of man, the nature of the world in which we live, and the nature of our knowledge of it. These beliefs reflect the mixed and conflicting philosophical and religious influences handed down to us. For the most part, neither the designers of reading programs nor educators in general are aware of the philosophical bases of their educational beliefs. They have not brought their basic beliefs to the fore for scrutiny and analysis. The stated and implied educational beliefs of the reading programs in this study therefore generally have unstated philosophical antecedents.

Although for many teachers and educators these basic beliefs do not operate at a conscious level, they

nevertheless do influence action. The problem this study investigates is to what degree the beliefs of teachers using the DISTAR program are the same as the beliefs of teachers using basal reader programs.

Educational Beliefs and Philosophical Beliefs

Brown measured educational beliefs in the Teacher Practices Inventory (Brown, 1968). He measured philosophical beliefs in the Personal Beliefs Inventory (Brown, 1968).

These two inventories measure what a teacher believes. By using similar and logically related sets of items from these two inventories, Brown found he could predict which teachers would use experimentalist practices in the classroom. He could also predict which teachers would use non-experimentalist practices in the classroom.

Two of the instruments used in this study are the final forms of Brown's educational beliefs inventory and Brown's philosophical beliefs inventory.

These inventories measure beliefs compatible with Dewey's experimentalism or in conflict with Dewey's experimentalism.

Dogmatism Scale

The DISTAR program is a relatively new program. A basal reader program is the traditional approach to the teaching of reading. The second question this study investigates is the degree of open-mindedness of teachers using two different reading programs.

Open-mindedness is measured according to the Dogmatism Scale, Form E, developed by Rokeach (1960). This is a measure of how people believe rather than what they believe. A teacher may believe in experimentalism in a closed-minded, dogmatic way or in an open-minded way inviting intellectual speculation. Rokeach gives evidence that value changes occur in both open-minded and closed-minded subjects. He also gives evidence that career changes tend to be consonant with value changes.

This study investigates whether there is a relationship between degree of open-mindedness and the kind of reading program teachers are using. Is the degree of open-mindedness of teachers using basal reader programs the same as the degree of open-mindedness of teachers using the DISTAR program?

The DISTAR Program

DISTAR stands for Direct Instructional System for Teaching Arithmetic and Reading. It is a program for teaching potential reading failures to read. The instructional program is:

1. carefully structured to meet specific behavioral objectives in a logical sequence.

2. systematic in providing for evaluation, acceleration and review.

3. a program in which everything is explicitly taught--nothing is left to chance.

4. a teaching program which is fully written out in the DISTAR presentation books for the teacher to follow.

5. constructed from tasks that have been written and sequenced in a way that will minimize the kinds of mistakes children can make.

6. an approach which is brisk and disciplined.

7. an approach in which each lesson makes use of fast, lively teacher presentation, student response and immediate feedback.

8. a program of instruction geared to teach skills directly to the pupil (Science Research Associates, 1971).

The educational beliefs of DISTAR taken from the DISTAR orientation manual are:

> We can give many labels to the child in a classroom who has trouble learning, remembering, and expressing himself...Or we can teach him...To teach him...his teachers must determine what he has not been taught; then they

> must make sure that he is taught every pre-requisite skill in a subject before he is introduced to more complex skills in that subject. This is the philosophy of the DISTAR Instructional System (Science Research Associates, 1971).

Over and over again the DISTAR materials stress the careful sequencing of skills and the careful diagnosis of pupil errors along with specific correction techniques to remedy these errors. The provision of an elaborate teacher's script does describe to the teacher the exact skills to be taught, and the words she will use to teach these skills. Although demanding on the teacher, the materials are extremely thorough in their presentation of the teaching of beginning reading.

In addition to the specific techniques, and the script for the teacher to follow, DISTAR provides teacher training. A two-day orientation session preceeds teaching and is followed up periodically by additional training sessions.

Perhaps the most cogent statement about DISTAR reading comes from Engelmann, the author, himself,

> The most critical part in reading instruction is the first step--the code-cracking step. Traditionally, the emphasis in reading has been on performing meaningful activities and on comprehension skills. But the hard fact of the matter is that children who are reading failures are not failures because they lack comprehension skills, or because they need meaningful activity. Often material

> that is called meaningful is not meaningful to the child and does not necessarily prepare him for the task of reading. When children can't read, it is usually because they can't take the first step. They can't crack the code. That is, they can't look at a word as a series of sounds and put the sounds together to form a word. The first two years of reading instruction are therefore the most critical, because during these years the child must be taught basic code-cracking and comprehension skills. Once he has learned these, he can move on to more sophisticated reading skills, but without the basic skills he will never be ready to take the next step.
>
> The DISTAR Reading Program is designed to teach /the child/ the skills he must have in order to read. It is designed to teach them quickly... (Engelmann, 1969).

Critics of the DISTAR program observe that "It challenges a host of entrenched values and assumptions in education and child development," (Friedlander, 1968) and that the learner "is treated as if he is without any interests, desires to know, feel, experience, compare, relate, and describe" (Moskovitz, 1968).

Basal Reader Programs

The five main steps in a typical basal reader lesson are 1) preparation including arousal of interest, explanation of new concepts, and oral and visual presentation of new words, 2) guided reading, 3) re-reading for specific purposes, 4) related activity, 5) enrichment. Commonly the pre-primers, primers and

first reader center around the family (Harris, 1961).

The basal reader programs included in this study were selected because they are widely used in the same urban areas where the DISTAR program is being used. This use within the urban community further assures like pupil populations for the two kinds of programs.

The Ginn Basic Readers

The Ginn Basic Reading Program provides for (1) continuity in growth of abilities, (2) variety of activities, (3) organization of experiences, and (4) content of important ideas.

> The Reading Act Is a Complex Process. When children read, they must (1) see words clearly, noting the difference between b and d or between hand and hard; (2) have experiences which enable them to understand the ideas expressed in a sentence or paragraph, as when they decide whether the word band refers to an elastic binder, a musical organization, or a group of outlaws; (3) go beyond the literal understanding of printed symbols and sense new relationships of ideas, such as making deductions about character or inferences about right and wrong; (4) be able not only to understand and judge, but also to put reading to use in some way, such as creating a new outcome in dramatization, preparing a report, or simply enjoying a good laugh.

> These simultaneous processes in the reading act suggest that reading in basic books is something more than one silent reading of a selection and greater than 'oral reading around the class" (Russell, 1961).

The Ginn reading program is organized in ten vertical strands that extend from Grades One through Eight. Some of these strands are reading abilities needed at all developmental levels:

Readiness

Word-study skills

Comprehension and study skills

Creative reading abilities

Reading interests

Related language abilities

Others center on instructional problems common to all grade levels:

Providing for enrichment activities

Relating reading activities to other areas of the curriculum

Evaluating growth

Providing for individual differences

The objectives of the First Reader include skills, habits, and attitudes and appreciations. The skills taught in the First Reader focus on comprehension, and word-study skills such as word meaning, word recognition, phonics, and structural analysis.

The specific skills taught are:

Comprehension Skills

1. To promote skill in the interpretation of story plot.
2. To promote the ability to interpret orally the mood and conversational text of the story.
3. To continue to develop the ability to read for details, to recall the sequential order of events, and to understand the main idea expressed in a group of related sentences.
4. To promote the ability to read creatively in such ways as anticipating plot development, drawing conclusions, making generalizations, and enjoying sensory images.
5. To promote the ability to follow increasingly more complex directions in independent activities related to reading.
6. To promote skill in reading critically in such ways as (1) recognizing the statement that is false, (2) discarding the irrelevant statement, (3) choosing the pertinent idea from among ideas related but not pertinent, and (4) regarding as humorous a silly or highly improbable statement.

Word-Study Skills

Word Meaning. 1. To continue to build meaningful associations for sight words through the use of (1) contrast and comparison, (2) context clues, (3) dramatic play or pantomime, (4) simple classification, and (5) pictorial illustration.

2. To promote the understanding that some words have more than one meaning, and to develop some skill in choosing the correct meaning to fit the specific context.
3. To develop increased understanding for the pronouns and conjunctions used in the basic vocabulary of the first reader.
4. To increase listening and speaking vocabularies through language experiences.

Word Recognition. 1. To develop accurate recognition of the one hundred seventy-one words presented in the basic vocabulary of the book.
2. To promote skill in the use of the general pattern or configuration of the word as an aid to recognition.
3. To develop the ability to use context clues to check recognition of words.
4. To teach the names of all letters in the alphabet as an aid in writing words and in retaining a sight vocabulary.

Phonics. 1. To develop the ability to combine the visual and auditory perception of identical elements in words (1) that begin with the same consonant, (2) that begin with the same digraph, (3) that have rhyming endings, (4) that end with the same consonant, and (5) that begin with the same consonant blend.
2. To develop some skill in attacking a new word by affixing or substituting an initial or final consonant to a known word.
3. To develop some skill in attacking new words through comparison with old words.
4. To develop some skill in the use of both context and phonetic clues to identify unfamiliar words.
5. To develop some skill in building a new word by affixing a blend or a digraph to a known word.

Structural Analysis. 1. To develop the ability to recognize both the root word and the variant when (1) 's is added to show possession (2) s or es is added to show the plural form of nouns, and (3) s, d, ed, and ing are added to known verb forms.
2. To develop the ability to recognize the parts of compound words and to build a few new compound words from known words (Russell, 1961).

"Good reading habits" include the proper handling and care of books and the appropriate application of the skills cited. General "attitudes and appreciations" include gaining pleasure and satisfaction from books, using printed materials to gain information and to satisfy personal needs. Specific "attitudes and appreciations" relate to story content: laughter in relation to humorous stories, and developing an understanding of characters by interpreting their actions and inferring their possible feelings.

> Though basic readers with accompanying materials have an important place in the reading program of a modern school, they do not constitute all of the materials used in a full-scale plan for reading activities, but are ordinarily supplemented by the materials presented below.
>
> Supplementary readers
> Library books of fiction and non-fiction
> The children's own writings or dictated stories
> Charts of various types
> Newspapers and magazines
> Picture dictionaries, dictionaries, and encyclopedias
> Captions on filmstrips (Russell, 1961)

Suggestions for related language experiences include conversation, planning, discussions, recording dramatic play, listening to material spoken or read orally, making explanations, giving descriptions, reporting, storytelling and making up stories, and

vocabulary enrichment are included in the manuals (Russell, 1961).

The Bank Street Readers

The Bank Street Readers follow the basic basal reader pattern in the design of their lessons. They are set in a distinctly urban setting. The pre-primers focus on the city itself and the people who live there, rather than the family. Suggestions for pre-reading activities include many trips into the neighborhood to establish an experiential background for the reading to follow.

John Neimeyer, Bank Street College President, states,

> The Bank Street Readers present a positive cross section of life in our growing urban centers and the surrounding areas. The bustle, the color, the variety of peoples that city children grow up with are depicted vididly in stories, poetry and non-fiction....
>
> For the urban child, whatever part of the city he comes from, the Readers come to life with a continuous series of shocks of recognition: people, places, and things he knows and cares about. In the pages of the Bank Street Readers, perhaps for the first time, the urban child will meet himself (Neimeyer, 1967).

The Bank Street Readers focus on establishing a frame of reference or experience for each reading

lesson, on use of a pre-reading story-related chart which includes the new words, on guided reading, on written questions to be answered after story reading, on reading skills including inference and word analysis skills, and on enrichment activities (Black, 1965).

The Chandler Reading Program

The lessons follow a plan that is similar to that described for other basal readers. The books are basal readers; yet they have certain unique characteristics.

The Pre-Primers and Primers in the Chandler program are called Language-Experience Readers. They embody what is basically an experience-chart approach. The readers developed out of the joint experiences of children and teachers. The written text comes from tape recordings of children's conversations while they participated in activities like swinging, shopping for groceries and going to the zoo. The children and their activities are the focus of the Pre-Primers. Photographs of children in natural situations accompany the text (Carillo, 1965).

The entire program is based on and shaped by a set of assumptions and educational beliefs:

1. The task of learning to read is made easier (a) if what children read has meaning for them and (b) if the language in which it is written represents in vocabulary and sentence structure their natural language expression.

2. Language competence and reading competence must be developed concurrently.

3. All children, especially the less advantaged, need to be both physically and mentally involved in the learning process: making choices; manipulating words, phrases and sentences; and listening and responding.

4. Children need repeated exposure to what is being learned through a variety of interesting and motivating experiences.

5. A reading program must meet the developmental needs of children: understanding of one's self and one's self image; appreciating the social environment; and knowing ways of adapting to one's peers.

6. A reading program must be carefully constructed and easy to follow, yet allow teachers maximum flexibility in choosing the suggestions, practices, activities and materials that meet the needs of their children.

7. Stories for urban children should be about experiences commonly shared by urban children of all ethnic and socio-economic groups (Noble and Noble, 1970).

The Open Court Basic Readers

The Open Court Language Arts Program has three main purposes: (1) to teach children to read and write independently by the end of the first grade, (2) to provide selections

> with literary quality and rewarding content, and (3) by means of the Open Court Composition Program, to provide a correlated language arts program from grades one through six.
>
> The Open Court Basic Readers form the core of the program... (Carus, 1966).

Reading, handwriting, spelling and composition are all taught from the same text. Reading and writing, the two essentials of literacy, are carefully developed to provide mutual support. The foundation program lays the foundation for independent reading by a sequential introduction to all the main sounds of the English language.

As each new sound is introduced the child hears, says and writes it. Blending skills are taught. The vocabulary in the beginning program is consistently phonetic so that children can routinely sound out words they do not recognize. The second program taught during the first year does not have a strictly phonetic vocabulary. The child is not asked to learn and apply dozens of rules. He discovers inductively the basic relationships of his language. Handwriting, dictation skills and proofreading skills lead to independent composition.

> The child's written work enables him to see and to evaluate his own progress in reading, in spelling, in penmanship, and in the writing of original sentences (Carus, 1966).

The Open Court reading lessons include the components characteristic of basal reader lessons. The designers of Open Court add writing and composition as essential parts of their program (Hughes, 1966; Trace, 1967).

Based on the program descriptions and the manuals, and in the case of the DISTAR program the writings of DISTAR authors Bereiter and Engelmann, it is fair to estimate that the DISTAR program would be non-experimentalist in character. Similarly an estimate of the basal reader programs is that they would be neutral or moderately experimentalist in character. However, a great deal of rote activity would pull the basal reader programs toward the non-experimentalist pole. On the other hand the use of creative writing, pupil initiated projects and truly experiential activities would pull the basal reader programs toward the experimentalist position.

The question this study poses is to what degree are the educational beliefs of teachers using the DISTAR program the same as the educational beliefs of teachers using basal reader programs.

The Reading Programs and Educational Beliefs

Dewey's experimentalism focuses heavily on education through doing, experiencing, and reflective thinking. His view on formalized reading is that it should be delayed until the child can make use of what he reads. Before this, reading should be taught only incidentally. Thus, any formal First Grade reading program would be non-experimentalist in Dewey's view. Intensive drill and rote learning is certainly non-experimentalist.

Bearing in mind that formal reading in First Grade would not be advocated by Dewey, the fact remains that formal reading has long been accepted for six year olds. In addition, formal reading for younger children is becoming more widely accepted and encouraged. Nonetheless any formal reading program for children below eight to ten years of age would seem to necessarily be largely non-experimentalist in character.

Some of the categories in Brown's educational beliefs inventory seem to have particular application for the DISTAR and basal reader programs in this study. These items concern "situations of experience," "challenging problems," and "generation of ideas." These kinds of experiences are compatible with

experimentalism. Items which are in conflict with experimentalism fall in such categories as "neglect of direct experience," "extrinsic motivation," "following an established method," and "using a general method for all alike."

Although some of the early reading programs suggest ways to counteract the trend, for the most part early reading programs such as the ones in this study, neglect situations of experience, provide no challenging problems, and do little to generate ideas. In contrast, these reading programs tend to neglect direct experience, often provide extrinsic motivation, follow an established method, and use a general method for all alike.

DISTAR makes no claims that it uses situations of experience, challenging problems, or seeks to generate ideas in pupils. While some of the basal programs stress experience in pre-reading and enrichment activities, the implementation of these activities is left to the teacher's ingenuity and initiative.

The differences in method, then, between the DISTAR program and the basal programs, based on the descriptions in their manuals would seem to be differences in the degree to which many of these

categories are emphasized, rather than differences in the kinds of experiences recommended. There are also differences in the range of skills these programs attempt to teach.

If the differences between DISTAR and the basal reader programs are mainly differences in the intensity of the teaching, the beliefs of the DISTAR teachers and the beliefs of the basal reader teachers should not differ greatly.

The Reading Programs and Open-mindedness

DISTAR is a new program and a highly structured program. Individual pupil thought and initiative is discouraged. The teacher follows a script which tells her what to say and what to do.

The basal reader programs are the traditional approach to elementary reading. The Teacher's Guides include a variety of activities for every lesson from which the teacher may choose.

From the implications of each program for freedom of implementation and choice of activities by the teacher, it seems probable that open-minded teachers would prefer a basal reading program. However, it does not follow that the closed-minded teacher would prefer the highly structured program. She may dogmatically

believe in the traditional approach.

DISTAR is a controversial program clearly in opposition to the beliefs of many experts in early childhood education. It is possible that only an open-minded teacher would even attempt to teach this program.

It seems that a teacher would have to have some degree of open-mindedness to volunteer to teach DISTAR, or to accept a job she knew would involve teaching DISTAR. If this is so it is probable that the DISTAR teachers are at least as open-minded or more open-minded than the basal reader teachers.

Significance of the Study

This study investigates the degree to which the beliefs of teachers of the DISTAR program are the same as teachers of basal reader programs. The content of teacher beliefs investigated centers on beliefs in agreement with or in disagreement with experimentalism. This aspect of the study investigates what teachers believe.

A second aspect of belief which this study investigates is how teachers hold their convictions. This study investigates the degree to which teachers hold their beliefs in an open-minded way. This

aspect, then, concerns the structure of teacher beliefs.

Both these aspects of beliefs, how teachers believe and what teachers believe, are related to the type of reading program the teacher teaches. This combination of structure and content of beliefs has not been investigated before in relation to reading.

If the beliefs of the teachers of the DISTAR program and the beliefs of teachers of the basal reader programs are the same, this is evidence that teachers teach either basal reader programs or the DISTAR program without regard to their personal beliefs. Personal beliefs make no difference when it comes to which reading program a teacher is using.

Hypotheses

The hypotheses for this study are:

1. There is no significant difference in educational beliefs as measured on the Teacher Practices Inventory between teachers of the DISTAR reading program and teachers of basal reader programs.
2. There is no significant difference in philosophic beliefs as measured on the Personal Beliefs Inventory between teachers

of the DISTAR reading program and teachers of basal reader programs.

3. There is no significant difference in open-mindedness as measured on the Dogmatism Scale between teachers of the DISTAR reading program and teachers of basal reader programs.

Operational Definitions

Experimentalism - is used as it is by Brown (1968), to represent one specialized interpretation of Dewey's experimentalism.

Open-mindedness - or degree of open-mindedness is an assessment based on openness or closedness of the beliefs system of an individual as developed by Rokeach (1960).

Basal Reader Program - is the traditional program of reading instruction whose components are defined by Harris (1961). The basal reader itself is a collection of stories which are used for instructing in reading. The basal reader programs included in this study are the Ginn Basic Readers, the Bank Street Readers, the Chandler Reading Program and the Open Court Basic Readers.

DISTAR - or Direct Instructional System for Teaching Arithmetic and Reading, is the tradename for a reading program originally developed for preschoolers (Engelmann, 1969, 1970; Bereiter, 1966).

Limitations

This study is based on a sample of 20 teachers, 10 teachers of the DISTAR program and 10 teachers of basal reader programs.

Content of teacher beliefs is related only to agreement or non-agreement with experimentalism. No other philosophic or educational points of view are measured. The Dogmatism Scale measures structure of beliefs as opposed to content of beliefs.

This study makes no attempt to observe and record experimentalist and non-experimentalist classroom practices of teachers.

Some of Brown's items of intercorrelation for his teacher profiles are omitted from the final forms of his inventories. The profiles identified in this study therefore

do not include all of the items listed by Brown.

No attempt has been made to poll judges on the experimentalist and non-experimentalist attributes of the reading programs selected for this study.

Assumptions

1. There is no systematic variation that significantly affects open-mindedness or experimentalist beliefs other than program taught.

CHAPTER II

RELATED RESEARCH

Literature on Educational Beliefs and Philosophic Beliefs

Brown (1968) developed the Teacher Practices Inventory which assesses educational beliefs and the Personal Beliefs Inventory which assesses philosophic beliefs. Both these inventories measure beliefs in agreement or disagreement with the experimentalism of John Dewey.

Brown bases his inventory on seven categories which Dewey sees as features of reflective thinking. These categories represent situations which:

1. deal with experience,
2. are uncertain, challenging or problematic
3. generate ideas,
4. are based on the observation and collection of data,
5. include the development of reasoned hypotheses or ideas,
6. include experimental application or testing,
7. include a conclusion, evaluation or report of results.

The "educational evils" around which Brown builds his inventories are:

1. neglect of direct experience,
2. reliance on extrinsic motivation,
3. learning made a direct and conscious end in itself,
4. following the mechanically prescribed steps of a method,
5. imposing a general method on all alike.

These seven experimentalist categories and five non-experimentalist categories form the basis of Brown's educational beliefs inventory and his teacher practices observations.

Brown's philosophic beliefs inventory represents six dualism or polarizations which, to Dewey, form a continuum. An experimentalist would see these dualisms as having no separation. A non-experimentalist would view them as separate and opposing ideas. They are:

Mind and body

Permanence and change

Science and morals

Emotions and intellect

Freedom and authority

Knowing and doing.

Brown intercorrelated the results of his Teacher Practices Inventory and his Personal Beliefs Inventory with observed classroom practice. He developed nine profiles of experimentalist and non-experimentalist classroom practice from the significant intercorrelations among the beliefs items and classroom practice. These nine profiles are:

Teachers who provided situations of experience.

*Teachers who neglected direct experience.

Teachers who organized learning around problems of genuine concern to pupils.

Teachers who encouraged development and refinement of hypotheses.

Teachers who encouraged pupils to test ideas experimentally.

Teachers who encouraged pupils to form conclusions based on experimental evidence.

*Teachers who made learning a direct and conscious end in itself.

*Teachers who followed the prescribed steps in an established method.

*Teachers who imposed a general method on all alike.

(Asterisked profiles are in conflict with Dewey.)

Brown derived his categories from Dewey's features of reflective thinking and his essentials of educative experience. The categories in conflict with Dewey

derive from Dewey's educational evils. Brown used similar groupings in constructing his Teacher Practices Inventory.

Brown's philosophic beliefs inventory derives from six philosophic dualisms which Dewey saw as continua. In the analysis of intercorrelations, Brown found three philosophic beliefs that correlated most often with experimentalist practices. These items concern "permanence and change" and are in agreement with Dewey:

> Nothing is or can be unchanging, absolutely certain.
>
> You can never prove that any fact is unconditionally true.
>
> All "truths" are relative.

Brown states that the student teachers in his study were most clearly differentiated on these three items.

A fourth item that appears frequently in the profiles concerns "knowing and doing." This item is in conflict with Dewey:

> Learning is the sum of impressions made on the mind as a result of presentation of the material to be known.

Brown also developed a profile of a "change" teacher and an opposing profile of a "certainty"

teacher, as well as a profile of an "inquiry" teacher and an opposing profile of an "acquisition" teacher (Brown, 1968).

In each profile Brown's observed practices significantly intercorrelate with educational beliefs items and philosophic beliefs items (Brown, 1968, pp. 176-188, 192-193, 205-206).

In summary, Brown (1963) found that three items from the philosophic beliefs inventory correlated most frequently with experimentalist practice; and that certain philosophic and educational beliefs are effective in predicting agreement or disagreement of classroom practices with experimentalism.

Based on total scores, the correlation between educational beliefs and observed practice was higher than the correlation between philosophical beliefs and observed practice (Brown, 1968).

In a subsequent study (Brown, 1969) Brown found that teachers' strongest educational beliefs were in agreement with Dewey. Their strongest educational disbeliefs were also in agreement with Dewey. However, the observed teacher practices of these same teachers often did not follow Dewey's tenets.

In spite of statistical results to the contrary concerning educational beliefs, Brown continually asserts that fundamental philosophic beliefs in experimentalism are the best predictors of experimentalist practices in the classroom.

Literature on Open-mindedness

Rokeach (1960) tested his Dogmatism Scale with groups of varying political persuasions to demonstrate the difference between his inventory and the F Scale. Closed-minded groups on the political left such as communists in England scored high in dogmatism, but low on the F Scale which measured only right authoritarianism.

Rokeach and his colleagues then studied the degree of open-mindedness among various religious groups and the degree of acceptance by members of these groups of members of other groups. Rokeach concludes that acceptance or rejection of members of other groups is based primarily on similarity of cognitive beliefs. Racial and ethnic similarities play only a very secondary role in acceptance or rejection and function symbolically as representative of beliefs. Prejudice is a form of a more general misanthropy which, where it exists, can be detected in relation to some members of the in-group as well as toward those outside the

group. He shows that compared to open-minded subjects, closed-minded subjects rejected more strongly all along the continuum of beliefs.

Rokeach also investigated the problem solving abilities of open-minded and closed-minded subjects. He concluded that open-minded and closed-minded subjects did not differ in their ability of analyze. However, open-minded subjects were better able to shift to new frames of reference and showed greater ability to synthesize.

In a study involving shifts in values over a period of six years, Rokeach showed that significant changes in values occurred for both open-minded and closed-minded subjects. He also found that career changes tended to follow the direction of value changes.

Harrison (1970) claims that normally, teachers have some prerogative in deciding which learning theory to use, and further that the teacher's view of how learning best occurs should influence what happens in his classroom. His teachers were asked to choose the learning theory they most nearly agreed with. The theories were arranged along a continuum from traditional, passive learning to progressive, dynamic learning. The open-mindedness of these teachers was

assessed by means of the Dogmatism Scale. The teachers were also rated by administrators on teaching performance. Those teachers who espoused a liberal or progressive theory of learning were significantly more open-minded. The open-minded teachers were also rated significantly lower on teaching performance by administrators.

Studies by Sawatzky (1969), Ausubel (1970) and Mouw (1969) measured the effects of dogmatism on learning, memory and perception. Sawatzky found that high dogmatic subjects perceived and remembered fewer verbal stimuli in filmed interviews. There were no significant differences between open-minded and closed-minded subjects in behavior post-diction, in an adjective check, in perception and memory of visual stimuli, and in total judging score. Ausubel tested learning of controversial material. He found that dogmatism markedly impaired the learning of a pro-Hanoi passage. He also found that high dogmatics who read a neutralizing introduction to the passage learned significantly more than high dogmatics who had a control introduction. Mouw tested the conclusion that open-minded subjects would score higher than closed-minded subjects on synthesis tasks, but that there would be no difference on analysis tasks.

He tested five categories based on Bloom's taxonomy: knowledge, comprehension, application, analysis and synthesis. Mouw found no significant difference between analysis and synthesis scores for his open-minded and closed-minded subjects. This contradicts Rokeach's findings. Mouw did find a significant difference in favor of the open-minded subjects across all five cognitive tasks. The differences became greater in application, analysis and synthesis. Mouw concludes that open-minded subjects are more adept at autonomous tasks than closed-minded subjects who depend more on authority and outside direction.

Several investigations of teachers and pre-service teachers studied dogmatism in relation to age. While Soderbergh (1964) found that some older teachers tend to be excessively dogmatic, Rabkin (1970) found no significant difference in dogmatism based on age. He also showed that even teachers with more than 10 years of experience were not significantly more dogmatic than teachers with less experience.

Zahn (1965) in a study involving interaction analysis as a supervisory technique concluded that low dogmatic student teachers were judged significantly more proficient in teaching performance than high

dogmatic student teachers, regardless of the kind of instruction and supervision they received. Zahn's findings on supervisory ratings congruent with open-mindedness are in opposition to Harrison's (1970) findings concerning administrators ratings of open-minded teachers.

Literature on DISTAR and Conventional Reading Programs

A comparison of DISTAR and another instructional program in First Grades in the Brownsville section of Brooklyn showed significant differences in achievement in favor of the DISTAR groups. The achievement tests on which the DISTAR groups did significantly better were language perception, vocabulary and total reading (Larsen, 1971b).

In a study in the Bedford-Stuyvesant section of Brooklyn (Larsen, 1971c) with First and Second Graders of low and low average ability, after eight months of instruction using DISTAR the lowest 20% of the students, five classes, scored above their expectancy level in verbal-pictorial association and in language perception. The expectancy level was the norm for socio-economic groups in the lower 35% of the national population.

Knudsen (1971) using DISTAR and a traditional curriculum with three and four year olds showed

significant gains in reading vocabulary and comprehension for the DISTAR groups. Anderson (1971) reported I.Q. gains for five year olds using DISTAR as opposed to a control group using a traditional curriculum. He also reported significant I.Q. gains for three and four year olds who had been in the DISTAR program for two years.

A University of Oregon publication (1971) on the Englemann-Becker follow through model shows that poor children who have been in the DISTAR instructional program three to four years score at or above national norms in word decoding (Wide Range Achievement Test). In addition 2,600 poor children in Grades K, 1, and 2 who started the program in Kindergarten, exceed the average I.Q. score of 100 (Slossen Intelligence Test). The Slossen test was used to assess language skills.

Other studies (Gordon, 1971) attest to I.Q. gains of preschoolers, Kindergarten and First Grade children, and to readiness and reading scores at or above grade level for pupils who are in a DISTAR instructional program.

Unfortunately, many of these studies lack comparable control groups. They compare scores to national norms or to adjusted national norms.

A number of the studies show a high correlation between pupils' achievement levels and the number of DISTAR lessons completed. While a great many of the studies show significant differences in favor of DISTAR in word decoding ability, very few found significant differences in reading comprehension.

Summary of Research

Brown found mixed results regarding the relation between educational beliefs, philosophic beliefs and classroom practice. Studies involving measures of open-mindedness have shown open-minded teachers to favor a dynamic learning theory as opposed to a traditional passive-type of learning theory. Ratings of the teaching performance of open-minded teachers varied from low to high in different studies. It seems that all cognitive abilities may be favored by open-mindedness. Open-mindedness is especially necessary for higher mental processes which call for autonomy.

It appears that this combination of inventories has not been used before in connection with reading programs.

From the available research it seems that the DISTAR program is an effective program for teaching decoding and verbal skills.

CHAPTER III

PROCEDURE

Design of the Instruments

In designing the Personal Beliefs Inventory and the Teacher Practices Inventory Brown submitted his items to six judges who were familiar with the general and educational philosophy of John Dewey and with teaching-learning situations in school classrooms. To be acceptable as either in agreement or disagreement with experimentalism, five of the six had to agree that it was indeed either in agreement or disagreement with experimentalism.

Brown also had well known educators respond to the inventories. Those who were well known to be pro-Dewey scored high in experimentalism. Those who were known to be in critical disagreement with Dewey scored low (actually near the theoretical mean). Some individuals scored either higher or lower than might generally have been expected. This inquiry was not conceived or executed as a controlled study.

Reliabilities for forms 5-A and 5-B were .58 for the Personal Beliefs inventory and .69 for the Teacher Practices inventory. On other populations reliability ranged from .55 to .78 for Personal Beliefs and from .56 to .94 for Teacher Practices (Brown, 1968).

Reliabilities on the Dogmatism Scale ranged from .68 to .93 (Rokeach, 1960).

Collection of the Data

The Educational Beliefs Inventory (EBI), the Philosophical Beliefs Inventory (PBI) and the Dogmatism Scale were distributed to a group of First Grade teachers in District 16 in Brooklyn, New York. These teachers taught either the DISTAR reading program or a basal reader program.

From those completing the questionnaire, a total of twenty teachers were selected for the study. Ten of these teachers use the DISTAR reading program and ten use a basal reader program.

The students of these teachers represent the same general population. That is to say, the pupils in the DISTAR program and those in the basal reader programs are drawn from the same general community, the same type of schools and share common background characteristics. In other words, the student groups

in the two programs are equivalent in terms of grade level and neighborhood.

The inventories used are the final forms of Brown's Teacher Practices Inventory (educational beliefs), Brown's Personal Beliefs Inventory (philosophic beliefs), and the Dogmatism Scale, Form E (degree of open-mindedness).

The scoring on all the inventories conforms to Brown's six point scale which is similar to that of the Dogmatism Scale. The customary one through seven scale is used in tallying the Dogmatism Scale scores.

Low scores on the Dogmatism Scale show open-mindedness and high scores show closed-mindedness. On the Educational Beliefs Inventory and the Philosophic Beliefs Inventory a low score shows beliefs in conflict with Dewey's experimentalism. A high score shows beliefs compatible with Dewey's experimentalism.

Treatment of the Data

Inventory Scores

The twenty sets of inventories were scored and grouped according to which reading program each teacher taught. The scores were then ranked within the group of teachers who teach the DISTAR program and within

the group of teachers who teach basal reader programs.

The Mann-Whitney U Test is appropriate for comparing the scores of the DISTAR teachers with the scores of the basal reader program teachers on each of the three inventories. This test is appropriate because the teachers in the two groups do not represent a normal distribution. That is, the teacher groups were not randomly selected.

The Mann-Whitney U Test compares the educational beliefs of DISTAR teachers with those of basal reader program teachers. It compares the philosophic beliefs of DISTAR teachers with those of basal reader program teachers. Finally, it compares the degree of open-mindedness of teachers of the DISTAR program with the degree of open-mindedness of teachers of basal reader programs.

Beliefs Profiles

The beliefs profiles derive from the experimentalist and nonexperimentalist clusters of practice and beliefs established by Brown. These clusters are based on significant intercorrelations of practices and beliefs.

The beliefs profiles in this study come from the acceptance or rejection by the teachers in this

study of 23 beliefs items. The teachers who fit each profile are categorized according to the reading program they teach, either the DISTAR program or a basal reader program.

Inventory Scores and Beliefs Profiles

An analysis of the high, medium, and low scorers on each of the three inventories shows the relation of inventory scores to the clusters of beliefs in the beliefs profiles.

CHAPTER IV

RESULTS

When compared by means of the Mann-Whitney U Test there is no significant difference at the .05 level between the teachers of DISTAR and the teachers of basal reader programs on any of the inventories.

There is a tendency for the DISTAR teachers in this study to score higher than the basal reader teachers in experimentalist beliefs (significant at the .10 level). That is, the DISTAR teachers tended to be more in agreement with Dewey's educational beliefs than the basal reader teachers.

There is also a tendency for the DISTAR teachers to score lower on the Dogmatism Scale than basal reader teachers. In other words, the DISTAR teachers tended to be more open-minded than the basal reader teachers.

There is little difference between the DISTAR teachers and the basal reader teachers in philosophic beliefs.

If the two groups are combined and the average scores on the inventories are used, the teachers in this

study were a little open-minded. The scoring equivalents on these inventories relate to scoring continuum used by the subjects themselves. Thus the point "I disagree a little" on the Dogmatism Scale corresponds to a scoring equivalent of 40 3's or a total score of 120. Similarly "I agree a little" also corresponds to a point on the scoring continuum. Brown uses these notations in analyzing his scores. The notation in this study follows Brown's designations. This type of notation is used in this study because it refers to specific points along the scoring continuum.

To state the result in terms of the scoring, the teachers in this study disagreed a little with dogmatism (average score, 120, "I disagree a little").

The teachers in this study agreed a little with experimentalist educational beliefs (average score, 172, which is slightly above the "I agree a little" score, 160).

On the average, the teachers in this study were neutral in their philosophic beliefs, neither agreeing nor disagreeing with Dewey's experimentalism (average score, 144, which is close to the dividing line, a score of 140, between agreement and disagreement.

A summary of the inventory scores appears in Table 1.

TABLE 1

SCORES AND AVERAGES OF DISTAR TEACHERS
AND BASAL READER TEACHERS
ON THREE INVENTORIES

	DISTAR Teachers N=10 Score	Basal Reader Teachers N=10 Score
Educational Beliefs**	210	202
	189	184
	188	180
	187	168
	185	165
	183	163
	177	148
	170	147
	161	146
	149	143
Average for DISTAR Teachers	180	Average for Basal Reader Teachers 165
Philosophical Beliefs Scores**	186	179
	165	153
	151	150
	143	149
	140	147
	137	147
	135	143
	133	138
	131	124
	107	119
Average for DISTAR Teachers	143	Average for Basal Reader Teachers 145

TABLE 1 (Continued)

	DISTAR Teachers N=10 Score		Basal Reader Teachers N=10 Score
Open-mindedness* (Dogmatism) Scores	73		103
	84		104
	99		111
	107		121
	107		125
	111		131
	112		134
	117		150
	122		153
	170		157
Average for DISTAR Teachers	110	Average for Basal Reader Teachers	129

*A low score shows open-mindedness. A high score shows closed-mindedness.

**High scores show beliefs compatible with Dewey. Low scores show beliefs in conflict with Dewey.

Educational Beliefs

On the average a teacher's educational beliefs agree a little with experimentalism.

Two teachers, one DISTAR teacher and one basal reader teacher, take a strong position, agreeing on the whole with experimentalist educational beliefs (score over 200).

Five other DISTAR teachers and one basal reader teacher agree on the whole with experimentalist educational beliefs, scoring 180-200.

Eight basal reader teachers and four DISTAR teachers agree a little with experimentalist educational beliefs.

None of the teachers in either program score below the midpoint, the dividing line between agreement and disagreement with experimentalist educational beliefs.

Philosophic Beliefs

On the average, a teacher in either group, takes a neutral position on experimentalist philosophic beliefs. She neither agrees nor disagrees with Dewey's philosophy.

One DISTAR teacher agrees on the whole with experimentalist philosophic beliefs (score 186).

Seven basal reader teacher and three DISTAR teachers agree a little with experimentalist philosophic beliefs.

Six DISTAR teachers and three basal reader teachers disagree a little with experimentalist philosophic beliefs.

Open-mindedness

On the average a teacher in this study is a little open-minded. To put it another way, on the average, a teacher disagrees a little with closed-mindedness.

Three DISTAR teachers agree with open-mindedness on the whole. Six DISTAR teachers and all ten basal reader program teachers agree with open-mindedness a little.

Only one teacher, a DISTAR teacher, is above the mid-point on the Dogmatism Scale. She tends to be neutral, neither open-minded nor closed-minded.

Beliefs Profiles

Brown's profiles of experimentalist and non-experimentalist practice derive from the results of his Teacher Practices Observation Record and his educational and philosophic beliefs items which significantly

intercorrelate with these practices. The beliefs profiles in this study are made up of the beliefs items that significantly intercorrelated in Brown's study and also remained on the final forms of his educational beliefs inventory and his philosophic beliefs inventory. The clusters of belief items in this study derive only from the beliefs items in the clusters Brown set up.

Using his most discriminating items, Brown found significant intercorrelations between educational beliefs, philosophic beliefs, and observed teacher practices. From these significant intercorrelations he typed nine patterns of observed classroom practice and the beliefs items significantly associated with each pattern of classroom practice.

Brown's educational beliefs categories come from Dewey's essentials of reflective thinking and from what Dewey saw as educational evils. The features of reflective thinking include: a situation of experience; a challenging problem, something new and uncertain; the generation of ideas or initial hypotheses; the observation and collection of data; the development of reasoned hypotheses; experimental application and testing; and a conclusion, evaluation and report of results.

The educational evils Brown uses include: neglect of direct experience; reliance on extrinsic motivation; learning made a direct and conscious end in itself; following mechanically prescribed steps; and imposing a general method on all alike.

Brown's philosophic beliefs items are based on six areas in Dewey's philosophy: mind and body; permanence and change; science and morals; emotions and intellect; freedom and authority; and knowing and doing.

Based on the beliefs items in this study, the teachers of the DISTAR program and the teachers of basal reader programs fit three of the experimentalist and non-experimentalist beliefs profiles. (See Table 2.)

Brown also identified two sets of antithetical categories based on practices and intercorrelated beliefs. These are (1) the "change" teacher and the "certainty" teacher, and (2) the "inquiry" teacher and the "acquisition" teacher.

The "change" teacher agrees with philosophic beliefs items concerning change or uncertainty; the "certainty" teacher disagrees with the change items and agrees with those having to do with permanence and certainty. The "change" teacher wants things kept flexible. The "certainty" teacher wants situations

settled, nailed down, fixed with absolute certainty.

Ten of the teachers in this study fit the "change" teacher beliefs profile. None fits the "certainty" teacher beliefs profile. (See Table 2.)

The "acquisition" teacher believes in the dualism of knowing and doing and disagrees with the continuity of knowing and doing. She believes in knowing versus doing. The "inquiry" teacher agrees with the continuity of doing and knowing and disagrees with the separateness of doing and knowing. The philosophic beliefs items which divide the "acquisition" teacher from the "inquiry" teacher concern learning and knowledge.

Only one of the teachers in this study fits the beliefs profile of the "acquisition" teacher. None of the teachers in this study fits the beliefs profile of the "inquiry" teacher. (See Table 2.)

A summary of the DISTAR and basal reader teachers who fit the beliefs profiles in this study appears in Table 2. Summaries of the modified beliefs profiles used in this study appear in Appendix A.

Twelve belief items make up the cluster "Organizes Learning Around Problems of Genuine Concern to Pupils." One DISTAR teacher fits this belief profile.

TABLE 2

DISTAR TEACHERS AND BASAL READER TEACHERS
FITTING FIVE TEACHER BELIEFS PROFILES

	No. of Teachers	
	Basal Reader Program	DISTAR Program
Experimentalist Profiles:		
Organizes learning around problems of genuine concern to pupils	--	1
Encourages development and refinement of hypotheses	1	1
Encourages pupils to form conclusions based on experimental evidence	8	5
"Change" teacher	6	4
Nonexperimentalist Profiles:		
"Acquisition" teacher	1	--

One DISTAR teacher and one basal reader teacher fit the belief profile "Encourages Development and Refinement of Hypotheses." This cluster consists of four items.

The cluster, "Encourages Pupils to Form Conclusions Based on Experimental Evidence," consists of two items. Eight basal reader teachers and five DISTAR teachers fit this beliefs profile.

Change and Certainty

Brown found three of his philosophic beliefs items most relevant in distinguishing experimentalists from nonexperimentalists. These items had to do with "permanence and change," or "change and certainty."

Six basal reader teachers and four DISTAR teachers fit the "change" teacher beliefs profile. This cluster is made up of four items.

None of the teachers fits the "certainty" teacher profile. The two of the DISTAR teachers and a basal reader teacher show conflict between their educational beliefs and their philosophic beliefs on the items in this cluster.

Acquisition versus Inquiry

The philosophic beliefs of the "acquisition" teacher and the "inquiry" teacher concern opposite points of view on knowing and doing and on knowledge and inquiry.

The beliefs profile of the "acquisition" teacher is based on 8 items. One of the basal reader teachers fits this beliefs profile.

None of the teachers in this study fits the beliefs profile of the "inquiry" teacher. Three teachers show conflicts between their educational beliefs and their philosophic beliefs on the items relating to the "inquiry" teacher.

Inventory Scores and Beliefs Profiles

Thirteen of the 20 teachers in this study appear in one or more of the beliefs profiles. Four of the profiles are experimentalist belief profiles. One is a nonexperimentalist belief profile.

Table 3 compares the numbers of high, medium and low scorers on each of the three inventories in this study, for each of the five beliefs profiles.

In order to get an idea of the relative importance of philosophic beliefs as compared to educational beliefs, the profiles are detailed according

TABLE 3

HIGH, MEDIUM AND LOW INVENTORY SCORES OF TEACHERS IN EXPERIMENTALIST AND NONEXPERIMENTALIST BELIEFS PROFILES

No. of Teachers	Profile	Philosophic Beliefs Scores	Educational Beliefs Scores	Dogmatism
Experimentalist Teachers				
1	problems of genuine concern	H	H	M
	subtotal	(1H)	(1H)	(1M)
2	development and refinement of hypotheses	H	H	M
		H	L	H
	subtotal	(2H)	(1H;1L)	(1M;1H)
13	form conclusions based on experimental evidence	H	H	M
		H	H	M
		H	M	L
		H	M	L
		H	L	H
		M	H	L
		M	M	H
		M	M	M
		M	M	L

TABLE 3 (Continued)

No. of Teachers	Profile	Philosophic Beliefs Scores	Educational Beliefs Scores	Dogmatism
	form conclusions based on experimental evidence (continued)	M	L	H
		M	L	M
		M	L	M
		L	M	H
	subtotal	(5H;7M;1L)	(3H;6M,41)	(4H;5M;4L)
10	"Change" teacher	H	H	M
		H	H	M
		H	M	L
		H	M	L
		H	L	H
		M	M	L
		M	L	H
		M	L	M
		M	L	M
		L	M	H
	subtotal	(5H;4M,1L)	(2H;4M;4L)	(3H;4M;3L)
Experimentalist Totals		13H	7H	8H
		11M	10M	11M
		2L	9L	7L
Nonexperimentalist Teachers				
1	"Acquisition" teacher	M	L	H
Nonexperimentalist Total		1M	1L	1H

to the relative position (high, medium or low) of each teacher in the beliefs profiles on the beliefs inventories. The top 27% and the bottom 27% of the teachers on each inventory are high and low scorers, respectively. The remainder are medium scorers. This analysis is instructive in delineating the trends in this study. However, the results may not be generalizable to other studies.

Of those teachers in this study appearing in experimentalist profiles, 13 were high scorers in philosophic beliefs. Seven were high scorers in educational beliefs. This seems to confirm Brown's contention that philosophic beliefs are more closely related to the experimentalist profiles than educational beliefs.

The fact that only two of the teachers in the experimentalist beliefs profiles were low scorers in philosophic beliefs, while 9 were low scorers in educational beliefs, seems to bear out Brown's assertion that fundamental philosophic beliefs are most closely related to experimentalist classroom practice.

Teachers fitting the experimentalist beliefs profiles were about evenly divided between high and low scorers in their degree of open-mindedness (Dogmatism Scale).

CHAPTER V

CONCLUSIONS

The major conclusion of this study is that there are no significant differences between teachers of the DISTAR reading program and teachers of basal reader programs in beliefs or degree of open-mindedness. The null hypotheses are upheld:

> There is no significant difference in educational beliefs between teachers of the DISTAR program and teachers of basal reader programs.
>
> There is no significant difference in philosophic beliefs between teachers of the DISTAR program and teachers of basal reader programs.
>
> There is no significant difference in the degree of open-mindedness of teachers using the DISTAR program and teachers using basal reader programs.

While there are no significant differences in this study at the .05 level, there are some tendencies worth noting for future research.

Differences in favor of the DISTAR teachers exist at the .10 level in both educational beliefs and in degree of open-mindedness.

In philosophic beliefs the group mean for the DISTAR teachers is very close to the group mean for

the basal reader teachers.

In analyzing the beliefs profiles, there is a tendency for high scorers in philosophical beliefs to be more numerous in the experimentalist beliefs profiles than high scorers in educational beliefs. This seems to bear out Brown's belief in the potency of philosophic beliefs.

There are conflicting results between the DISTAR teachers on one hand and the teachers of basal reader programs on the other, in experimentalist beliefs. There is a tendency for DISTAR teachers to score a little higher in educational beliefs than basal reader teachers. The one teacher who is represented on all four experimentalist beliefs profiles is a DISTAR teacher.

However, basal reader teachers are represented in the experimentalist beliefs profiles 15 times, while DISTAR teachers appear only 11 times.

Finally, the only teacher fitting a non-experimentalist beliefs profile teaches a basal reader program.

Future Research

1. It would be interesting using a larger group of teachers to compare high and low scorers on

the philosophical beliefs inventory as to their appearances in the beliefs profiles. This would determine whether there are reliable statistical differences in philosophic beliefs related to the beliefs profiles when a larger number of subjects is used. The tendencies in this study seem to confirm Brown's contention that only those who are confirmed experimentalists in their basic philosophic beliefs fit the experimentalist profiles.

2. A comprehensive analysis of the experimentalist and nonexperimentalist attributes of reading programs would permit a matching of program characteristics and teacher beliefs as measured by the beliefs inventories used in this study.

3. Studies with larger groups of teachers could confirm or deny the tendencies found in this study: DISTAR teachers tend to be more open-minded than teachers of basal reader programs; DISTAR teachers tend to score higher than basal reader teachers in educational beliefs; more basal reader teachers than DISTAR teachers fit experimentalist beliefs profiles; the most thorough going experimentalist is a DISTAR teacher; the only teacher fitting a nonexperimentalist profile is a basal reader teacher.

4. An analysis and comparison of teacher verbal behavior in the DISTAR program and in basal reader programs would detail the classroom implementation of these two reading programs and would identify their differences and similarities.

REFERENCES

Anderson, B. E. An Evaluative Study: Teaching Three- and Four-Year Olds in a Structured Education Program in Granite School District, Utah, DISTAR Case Study Summary No. 18. In M. B. Gordon (Ed.), DISTAR Instructional System. Chicago: Science Research Associates, 1971.

Ausubel, D. P. & Tenzer, A. G. Components of and Neutralizing Factors in the Effects of Closed-Mindedness on the Learning of Controversial Material. American Educational Research Journal, 1970, 7, 267-273.

Bereiter, C. & Engelmann, S. Teaching Disadvantaged Children in the Preschool. Englewood Cliffs, N.J.: Prentice-Hall, 1966.

Black, I. S. (Ed.) Teacher's Guide to Around the City. Bank Street College of Education. New York: MacMillan, 1965.

Black, I. S. (Ed.) Teacher's Guide to Readiness Experiences and In the City and People Read. Bank Street College of Education. New York: MacMillan, 1967.

Brown, B. B. The Relationship of Experimentalism to Classroom Practices. Dissertation Abstracts, 1963, 23(9), 3256-3257.

Brown, B. B. The Experimental Mind in Education. New York: Harper & Row, 1968.

Brown, B. B. Congruity of Student Teachers' Beliefs and Practices with Dewey's Philosophy. Educational Forum, 1969, 33, 163-168.

Carrillo, I. W. & Zumwalt, E. N. Teacher's Guide for Let's Look, Words to Read and Pictures to Read. San Francisco: Chandler Publishing Company, 1965.

Carus, M. B. Foreword to Teacher's Guide to the Foundation Program (1:1). LaSalle, Ill.: Open Court Publishing Company, 1966.

Engelmann, S. & Brunner, E. C. DISTAR READING, Teacher's Guide. Chicago: Science Research Associates, 1969.

Engelmann, S. Preventing Failure in the Primary Grades. Chicago: Science Research Associates, 1970.

Erickson, E., McMillan, J., Bonnell, J., Hofmann, L., & Callahan, C. Experiments in Head Start and Early Education: The Effects of Teacher Attitude and Curriculum Structure on Preschool Disadvantaged Children. Final Report. Project Head Start, Office of Economic Opportunity, OEO Contract No. 4130, 1969.

Friedlander, B. Z. The Bereiter-Engelmann Approach. Educational Forum, 1968, 32(3), 356-362.

Gordon, M. B. (Ed.) DISTAR Instructional System, Summaries of Case Studies on the Effectiveness of the DISTAR Instructional System. Chicago: Science Research Associates, 1971.

Harris, A. J. How to Increase Reading Ability. New York: David McKay, 1961.

Harrison, A., Jr. & Scriven, E. G. Can You Be a Liberal and Teach, Too? Peabody Journal of Education, 1970, 47, 355-359.

Hughes, A. Teacher's Guide to the Foundation Program (1:1). LaSalle, Ill.: Open Court Publishing Company, 1966.

Knudsen, G. P. An Evaluation of a Preschool Program in Granite School District, Utah, DISTAR Case Study Summary No. 17. In M. B. Gordon (Ed.), DISTAR Instructional System. Chicago: Science Research Associates, 1971.

Karnes, M. in collaboration with Hodgins, A. S., Teska, A., & Kirk, S. A. Investigations of Classroom and At-Home Interventions. Final Report. Contract No. OE 6-10-235, Office of Education, U.S. Department of Health, Education and Welfare, 1969.

Larsen, V. S. Change in a California First Grade, DISTAR Case Study Summary No. 4. In M. B. Gordon (Ed.), DISTAR Instructional System. Chicago: Science Research Associates, 1971. (a)

Larsen, V. S. A Comparison of First-Grade Achievement in Brooklyn, New York, DISTAR Case Study Summary No. 11. In M. B. Gordon (Ed.), DISTAR Instructional System. Chicago: Science Research Associates, 1971. (b)

Larsen, V. S. Verbal-Pictorial Association and Language Perception Scores from Low Socio-Economic First-Graders in Brooklyn, New York, DISTAR Case Study Summary No. 12. In M. B. Gordon (Ed.), DISTAR Instructional System. Chicago: Science Research Associates, 1971. (c)

Moskovitz, S. T. Some Assumptions Underlying the Bereiter Approach. Young Children, 1968, 24(1), 24-31.

Mouw, J. T. Effect of Dogmatism on Levels of Cognitive Process. Journal of Educational Psychology, 1969, 60, 365-369.

Niemeyer, J. H. Foreword to Teacher's Guide to Readiness Experiences and In the City and People Read. New York: MacMillan, 1967.

Noble and Noble. Teacher's Guide, Let's See the Animals, Primer, Chandler Reading Program. New York: Noble and Noble, 1970.

Rabkin, L. Y. The Dogmatism of Teachers? Journal of Teacher Education, 1970, 21, 47-49.

Rokeach, M. The Open and Closed Mind. New York: Basic Books, 1960.

Russell, D. H. & Ousley, O. Manual for Teaching the First Reader. (rev. ed.) Boston: Ginn, 1961.

Sawatzky, D. D. & Zingle, H. W. Accurate Interpersonal Perception and Open-mindedness. Perceptual and Motor Skills, 1969, 29, 395-400.

Science Research Associates. DISTAR Orientation, Participant's Manual. (rev. ed.) Chicago: Science Research Associates, 1971.

Singer, B. The Effects of Structured, Direct Instruction on the Achievement and Adjustment of Kindergarten Pupils. Unpublished doctoral dissertation, Rutgers University, 1971.

Soderbergh, P. A. Dogmatism and the Public School Teacher. Journal of Teacher Education, 1964, 15, 245-251.

Trace, A., Jr. Teacher's Guide to Reading is Fun. LaSalle, Ill.: Open Court Publishing Company, 1967.

University of Oregon. Engelmann-Becker Follow Through Model, Summary of Principal's Conference, New Orleans, Louisiana. University of Oregon, 1971. (Mimeographed.)

Weikart, D. P. Programs Used with Functionally Retarded, Disadvantaged Children, DISTAR Case Study Summary No. 5. In M. B. Gordon (Ed.), DISTAR Instructional System. Chicago: Science Research Associates, 1971.

Zahn, R. D. The Use of Interaction Analysis in Supervising Student Teachers. Dissertation Abstracts, 1965, 26, Pt. 2, 1504.

SUMMARY OF THE FIVE BELIEFS PROFILES FOUND IN THIS STUDY

Brown constructed his 13 profiles from observed practices in the areas Dewey describes as essentials of educative experience, and educational evils. Brown's profiles are made up of clusters of observed practices (from his Teacher Practices Observation Record) that significantly intercorrelate with educational and philosophic beliefs (his Teacher Practices Inventory and his Personal Beliefs Inventory).

Brown's study of intercorrelations between beliefs and classroom practice was based on 44 beliefs items and 30 items of classroom practices which were the most discriminating of his items. However, his original correlations were done in 1963. Subsequently Brown further refined his inventories and developed the final inventory forms which consist of 40 items each.

The final refinement dropped 21 beliefs items from the beliefs profiles items that intercorrelated with practice.

Only 10 philosophic beliefs items and 13 educational beliefs items, or 23 beliefs items in total, remain on the final forms of his inventories. The beliefs items in the beliefs profiles in this study

APPENDIX A

SUMMARY OF THE
FIVE BELIEFS PROFILES
FOUND IN
"A STUDY OF EXPERIMENTALIST BELIEFS
AND OPEN-MINDEDNESS OF TEACHERS
OF FIRST GRADE READING"

SUMMARY OF THE FIVE BELIEFS PROFILES FOUND IN THIS STUDY

Brown constructed his 13 profiles from observed practices in the areas Dewey describes as essentials of educative experience, and educational evils. Brown's profiles are made up of clusters of observed practices (from his Teacher Practices Observation Record) that significantly intercorrelate with educational and philosophic beliefs (his Teacher Practices Inventory and his Personal Beliefs Inventory).

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The final refinement dropped 21 beliefs items from the beliefs profiles items that intercorrelated with practice.

Only 10 philosophic beliefs items and 13 educational beliefs items, or 23 beliefs items in total, remain on the final forms of his inventories. The beliefs items in the beliefs profiles in this study

are consonant with the items remaining on the final forms of Brown's educational beliefs inventory and his philosophical beliefs inventory. These are the beliefs inventories used in this study.

The beliefs profiles in this study are therefore modifications of the beliefs profiles Brown found to be intercorrelated with observed practices. Teachers in this study fit 5 of Brown's profiles. The other 8 profiles were not found among the teachers in this study.

The belief profile differences are:

> for "teachers who organize learning experiences around problems of genuine concern to pupils," 12 of the original 13 beliefs items remain.
>
> for "teachers who encourage pupils to develop and refine hypotheses," 4 of the original 7 beliefs items remain.
>
> for "teachers who encourage pupils to form their own conclusions based on experimental evidence," both the original beliefs items remain.
>
> for the "change" teacher, 4 of the original 6 beliefs items remain.
>
> for the "acquisition" teacher, 8 of the original 13 items remain.

The specific beliefs items in each of the beliefs profiles in this study and Brown's interpretation of these beliefs follow.

A. Experimentalist and Nonexperimentalist Beliefs Profiles

Profile 1
"Teachers who organized learning experiences around problems of genuine concern to pupils"

> Teachers who organized learning experiences around problems of genuine concern to pupils, /Table 4/ believed that this is a world of relative change. Such teachers deliberately or knowingly allowed children to work on their own problems. Furthermore, they believed in encouraging pupils to hypothesize about their problems. They clearly rejected the notion that knowledge is something to be impressed upon the minds of men from without. Remaining completely consistent, they also rejected beliefs that teachers should make learning a direct and conscious and in itself, that teachers should follow the prescribed steps of an established method, and that a restrictive and inactive method of instruction should be imposed on all pupils in the class (Brown, 1968).

These teachers also denied the experimentalist belief of allowing children to tackle problems that appear to be "over their heads." This is a contradiction of the theoretical framework of experimentalism.

See Table 4 for a detailed listing of the items in this profile. The items in Brown's original profile are given in Brown, 1968, pages 179-180.

TABLE 4

Profile 1
Teachers Who Organized Learning Around Problems of Genuine Concern to Pupils (from Brown, 1968)

Positive Correlations

Philosophic Beliefs

Nothing is or can be unchanging--absolutely certain.
You can never prove that any fact is unconditionally true.

Educational Beliefs

Encourages children to suggest what might be done--to make "hypothetical leaps" into the unknown.
Puts pupils to work on what they see as their own problems, rather than something that is the teacher's or textbook's problem.
Has pupils compare the value of alternative courses of action and pass judgment upon their relative desirability.
Focuses attention on what the children do or say, rather than on what the teacher does or says.

Negative Correlations

Philosophic Disbeliefs:

Learning is the sum of impressions made on the mind as a result of presentation of material to be known.

Educational Disbeliefs:

Organizes learning around questions posed by the teacher or the textbook.
Frequently calls for the undivided attention of the group and scolds those who do not respond.
Faithfully follows a planned schedule in order to get in the number of minutes each week alotted to each subject in the curriculum.

TABLE 4 (Continued)

Educational Disbeliefs: (Continued)

Encourages children to adventure into "deep water," to tackle problems that appear to be "over their heads."
Once work has begun, insists that children remain in their places and concentrate on the task at hand.

Profile 2
"Teachers who encouraged pupils to develop and refine hypotheses"

Teachers who encouraged pupils to develop and refine hypotheses also believed in continual change. Such "hypothesizing" or "hypothetical mode" teachers believed in pupils working on problems of genuine concern. Teachers of this type rejected the belief that learning is primarily a matter of acquiring mental impressions. As good experimentalists they believed in engaging pupils in direct experiences (Brown, 1968).

See Table 5 for a complete itemization of this profile. The items in Brown's original profile are given in Brown, 1968, page 181.

TABLE 5

Profile 2
Teachers Who Encouraged Development and Refinement of Hypotheses (from Brown, 1968)

Positive Correlations

Philosophic Beliefs:

Nothing is or can be unchanging--absolutely certain.
You can never prove that any fact is unconditionally true.

Educational Beliefs:

Frequently asks children to choose among several alternatives.

Negative Correlations

Philosophic Disbeliefs:

Learning is the sum of impressions made on the mind as a result of presentation of material to be known.

Educational Disbeliefs:

None

Profile 3
"Teachers who encouraged pupils to form their own conclusions based on experimental evidence"

Teachers who encouraged pupils to form their own conclusions based on experimental evidence clearly believed in a world of relative change (Brown, 1968).

See Table 6 for a complete itemization of this profile. The items in Brown's original profile are

given in Brown, 1968, page 183.

TABLE 6

Profile 3
Teachers Who Encouraged Pupils to Form Conclusions
Based on Experimental Evidence (from Brown, 1968)

Positive Correlations

Philosophic Beliefs:

All "truths" are relative.
Nothing is or can be unchanging--absolutely certain.

Educational Beliefs:

None

Negative Correlations

Philosophic Disbeliefs:

None

Educational Disbeliefs:

None

B. "Change" and "Certainty" Beliefs Profile

Profile 4

The change-certainty issue was represented on Brown's philosophic beliefs inventory by three statements:

All "truths" are relative.

> Nothing is or can be unchanging--absolutely certain.
>
> You can never prove that any fact is unconditionally true.

These items involve "permanence and change" or "change and certainty." According to the theoretical framework, experimentalists will agree with all three items and nonexperimentalists will disagree with all three of them. Brown (1968) says the subjects in his study were most clearly differentiated on these items.

The "change" teacher is open to the possibility of change and is able to evaluate changes in the context of the experimental method. She wants things kept flexible, relative to changing conditions. The nonexperimentalist teacher on the other hand is threatened by change. The "certainty" teacher wants situations closed, settled, nailed down, fixed with absolute certainty.

The philosophic beliefs of the "change" teacher were significantly related to the educational belief that the teacher should

> Encourage children to suggest what might be done--to make "hypothetical leaps" into the unknown.

The philosophic beliefs of the "certainty" teacher correlated with educational beliefs that the

teacher should:

> Organize learning around questions posed by the teacher or the textbook.
>
> Encourage children to adventure into "deep water," to tackle problems that appear to be "over their heads." (This is a contradiction of the theoretical framework. Nonexperimentalists are theoretically expected to disagree.)
>
> Frequently have all pupils working on the same page of the same book at the same time. (Brown, 1968)

See Table 7 for a complete itemization of the educational beliefs items. The items in Brown's original profile are given in Brown, 1968, pages 192-193.

TABLE 7

Profile 4
The "Change" Teacher (from Brown, 1968)

Educational Beliefs:

> T should encourage p to suggest what might be done--to make "hypothetical leaps" into the unknown.

The "Certainty" Teacher (from Brown, 1968)

Educational Beliefs:

> T should organize learning around questions posed by T or textbook.
> T should encourage P to adventure into "deep water," to tackle problems that appear to be "over their heads."
> T should frequently have all p working on the same page of the same book at the same time.

C. Acquisition vs. Inquiry Beliefs Profiles

Profile 5

> Teachers who agreed with Dewey about the continuity of knowing and doing (knowledge as inquiry) also agreed with him about educational beliefs and in their observed classroom practices. On the other hand, teachers who disagreed with Dewey by holding beliefs in the dualism of knowing versus doing (knowledge as acquisition) also held beliefs about education and used classroom practices which were in conflict with experimentalism (Brown, 1968).

The philosophic beliefs related to classroom practice on the "Acquisition versus Inquiry" issue were:

> Knowledge is artificial and ineffective to the degree that it is presented as truth to be accepted, held, and treasured for its own sake.
>
> Learning is the sum of impressions made on the mind as a result of presentation of material to be known.
>
> Truth exists ready-made somewhere; the task of the scholar is to find it.
>
> Knowledge is the sum total of what is known as that is handed down by books and learned men.

"Acquisition" teachers rejected the first item and agreed with the last three. Conversely, "Inquiry" teachers agreed with the first item and rejected the last three.

"Inquiry" teachers believed that knowing and doing were closely and inseparably related. Knowledge is viewed as part of the process of inquiry.

"Acquisition" teachers believed that knowing and doing are distinctly different affairs. Knowledge has a special existence and value in and of itself which is quite apart from the means by which it is acquired or the use to which it may be put. Knowledge is something to be acquired for its own sake (Brown, 1968).

See Table 8 for a complete itemization of the educational beliefs items. The items in Brown's original profile are given in Brown, 1968, pages 205-206.

TABLE 8

Profile 5
The "Acquisition" Teacher (from Brown, 1968)

Educational Beliefs:

A good teacher organizes learning around questions posed by the teacher or the textbook.
A good teacher frequently calls for the undivided attention of the group and scolds those who do not respond.
A good teacher, once work has begun, insists that children remain in their places and concentrate on the task at hand.
A good teacher tells children where to start and what to do to accomplish the task at hand.

The "Inquiry" Teacher

Educational Beliefs:

A good teacher has pupils compare the value of alternative courses of action and pass judgment on their relative desirability.

TABLE 8 (Continued)

Educational Beliefs (continued)

A good teacher focuses attention on what the children do or say rather than on what the teacher does or says.
A good teacher provides pupils a chance to discover by experiencing actual effects whether their choice of this rather than that is a judicious one.

APPENDIX B

INVENTORY FORM GIVEN TO FIRST GRADE TEACHERS IN DISTRICT 16, BROOKLYN, NEW YORK

80 March 7, 1972

To Beginning Reading Teachers:

As a fellow teacher and professional, I'm asking for a few minutes of your time. The attached profile and inventory are part of a study I'm conducting on beginning reading.

One of the programs in the study is the DISTAR Reading Program. I have talked with the author, Siegfried Engelmann, and he is aware of this study. He has urged that this kind of work be carried out.

As a study of beginning reading, this project will further knowledge about teaching procedures in reading and will ultimately benefit students in beginning reading.

I would be happy to welcome any of you as guests to share your experiences with my students who are prospective teachers. In any case, I would be glad to have you come to visit my classes.

To complete the inventory, it is only necessary to circle a number from 1 to 6 for each item.

Will you take a few minutes to help a co-worker?

Sincerely,

(Mrs.) Beatrice Mayes
Instructor
Newark State College

Teacher Profile

Name _____

Male _____ Female _____ Grade now teaching _____

Reading Program new teaching _____

Years teaching this Reading Program _____

Years teaching _____

Age _____

Highest Degree: Bachelors _____

Bachelors plus 30 _____

Masters _____

Doctorate _____

Other (indicate) _____

Teaching Certificate:

Name _____

INVENTORY

This is a study of what people believe is good teaching. Each statement below describes teacher behavior--something a teacher might do in a classroom. Many different and opposing kinds of teacher practices are presented here. As you read these statements, you will find your-self agreeing with some, disagreeing with some, and uncertain about others. The best answer to each statement is your personal belief or opinion.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write 1, 2, 3, or 4, 5, 6, depending on how you feel in each case.

1: I agree very much.	4: I disagree a little.
2: I agree on the whole.	5: I disagree on the whole.
3: I agree a little	6: I disagree very much.

1 2 3 4 5 6 Teacher focuses attention on what the students do or say, rather than on what the teacher does or says.

1 2 3 4 5 6 Teacher allows students to move freely about the room while engaged in purposeful activity.

1 2 3 4 5 6 Teacher gives students a number of starting places and a number of different ways of getting at what is to be done.

1 2 3 4 5 6 Teacher engages students in dramatizations, music, art and other creative activities.

1 2 3 4 5 6 Teacher makes "doing something" with a thing, rather than the thing itself, the center of student's attention.

1 2 3 4 5 6 Teacher asks students to work on their own problems, rather than something made a problem only for the purpose of conveying instruction in some school subject.

1 2 3 4 5 6 Teacher lets students become involved in ugly or distressing aspects of subjects.

1 2 3 4 5 6 Teacher insists that students face up to the realities of unpleasant predicaments and plights they get themselves into.

Name _____

1: I agree very much.
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 Teacher encourages students to adventure into "deep water," to tackle problems that appear to be "over their heads."

1 2 3 4 5 6 teacher encourages students to suggest what might be done--to make "hypothetical leaps" into the unknown or untested.

1 2 3 4 5 6 Teacher gives students a wide choice in how they answer questions.

1 2 3 4 5 6 Teacher gives students a free rein in devising and inventing proposals for what might be done to clear up troublesome situations.

1 2 3 4 5 6 Teacher urges students to put everyday things to uses which have not occurred to others.

1 2 3 4 5 6 Teacher gives students opportunity to select facts and information which they consider appropriate to the question.

1 2 3 4 5 6 Teacher has students compare the value of alternative courses of action and pass judgment on their relative desirability.

1 2 3 4 5 6 Teacher frequently asks students to choose among several alternatives.

1 2 3 4 5 6 Teacher permits students to go ahead with plans based on foresight, observation, and consideration of several alternatives--even when sure their judgment is mistaken.

1 2 3 4 5 6 Teacher gives students a chance to discover by experiencing actual effects whether their choice of this rather than that idea was a judicious one.

1 2 3 4 5 6 Teacher asks the students to help decide when questions have been satisfactorily answered.

Name _____

1: I agree very much
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 Teacher encourages students to put their suggestions to a test with such remarks as "You'll never know unless you try it."

1 2 3 4 5 6 Once work has begun, teacher insists that students remain in their places and concentrate on the task at hand.

1 2 3 4 5 6 Teacher calls for the undivided attention of the group and scolds those who do not respond.

1 2 3 4 5 6 Teacher limits physical activity to the gym or playground.

1 2 3 4 5 6 Teacher motivates students to greater intellectual effort by rewarding them with grades, marks, prizes, or privileges.

1 2 3 4 5 6 Teacher organizes learning around questions posed by the teacher or textbook.

1 2 3 4 5 6 Teacher sticks to questions which can be answered by looking in the textbook or other references readily available in the school.

1 2 3 4 5 6 Teacher accepts material in the approved textbook as a reliable measure for the appropriateness of information brought in by students from other sources.

1 2 3 4 5 6 Teacher asks the kind of questions that students should be able to answer if they have studied the lesson.

1 2 3 4 5 6 Teacher makes the acquisition of knowledge and skills the center of students" attention and effort.

1 2 3 4 5 6 Teacher makes a direct presentation of the subject matter to be covered.

1 2 3 4 5 6 Teacher makes students emphatically aware that they are here to study and learn.

Name _____

1: I agree very much. 4: I disagree a little.
2: I agree on the whole. 5: I disagree on the whole.
3: I agree a little. 6: I disagree very much.

1 2 3 4 5 6 When one student fails to answer a question, asks another student to supply the correct answer.

1 2 3 4 5 6 Teacher quickly tells students whether their answers are "right" or "wrong."

1 2 3 4 5 6 Teacher faithfully follows a planned schedule in order to get in the number of minutes each week allotted to each subject in the curriculum.

1 2 3 4 5 6 Teacher shows students the most economical and efficient way to get a job done, and expects them to do it pretty much that way.

1 2 3 4 5 6 Teacher tells students where to start and what to do to accomplish the task at hand.

1 2 3 4 5 6 Teacher uses a set standard to judge the work of all students in the class.

1 2 3 4 5 6 Teacher provides a model to show students exactly what their work should be like when it is finished.

1 2 3 4 5 6 Teacher usually has all students working on the same page of the same book at the same time.

1 2 3 4 5 6 Teacher provides approximately the same materials for each student in the class.

Name _____

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perpaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write 1, 2, 3, or 4, 5, 6, depending on how you feel in each case.

1: I agree very much.
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 The highest form of government is a democracy and the highest form of democracy is a government run by those who are must intelligent.

1 2 3 4 5 6 Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

1 2 3 4 5 6 It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.

1 2 3 4 5 6 Man on his own is a helpless and miserable creature.

1 2 3 4 5 6 Fundamentally, the world we live in is a pretty lonesome place.

1 2 3 4 5 6 Most people just don't give a "damn" for others.

1 2 3 4 5 6 I'd like it if I could find someone who would tell me how to solve my personal problems.

1 2 3 4 5 6 It is only natural for a person to be rather fearful of the future.

1 2 3 4 5 6 There is so much to be done and so little time to do it in.

1 2 3 4 5 6 Once I get wound up in a heated discussion I just can't stop.

Name _____

1: I agree very much.
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.

1 2 3 4 5 6 In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.

1 2 3 4 5 6 It is better to be a dead hero than to be a live coward.

1 2 3 4 5 6 While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.

1 2 3 4 5 6 The main thing in life is for a person to want to do something important.

1 2 3 4 5 6 If given the chance I would do something of great benefit to the world.

1 2 3 4 5 6 In the history of mankind there have probably been just a handful of really great thinkers.

1 2 3 4 5 6 There are a number of people I have come to hate because of the things they stand for.

1 2 3 4 5 6 A man who does not believe in some great cause has not really lived.

1 2 3 4 5 6 It is only when a person devotes himself to an ideal or cause that life becomes meaningful.

1 2 3 4 5 6 Of all the different philosophies which exist in this world there is probably only one which is correct.

1 2 3 4 5 6 A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.

1 2 3 4 5 6 To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.

Name _____

1: I agree very much. 4: I disagree a little.
2: I agree on the whole. 5: I disagree on the whole.
3: I agree a little. 6: I disagree very much.

1 2 3 4 5 6 When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.

1 2 3 4 5 6 In times like these, a person must be pretty selfish if he considers primarily his own happiness.

1 2 3 4 5 6 The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

1 2 3 4 5 6 In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.

1 2 3 4 5 6 A group which tolerates too much differences of opinion among its own members cannot exist for long.

1 2 3 4 5 6 There are two kinds of people in this world: those who are for the truth and those who are against the truth.

1 2 3 4 5 6 My blood boils whenever a person stubbornly refuses to admit he's wrong.'

1 2 3 4 5 6 A person who thinks primarily of his own happiness is beneath contempt.

1 2 3 4 5 6 Most of the ideas which get printed nowadays aren't worth the paper they are printed on.

1 2 3 4 5 6 In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.

1 2 3 4 5 6 It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.

1 2 3 4 5 6 In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.

Name _____

1: I agree very much. 4: I disagree a little.
2: I agree on the whole. 5: I disagree on the whole.
3: I agree a little. 6: I disagree very much.

1 2 3 4 5 6 The present is all too often full of unhappiness. It is only the future that counts.

1 2 3 4 5 6 If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."

1 2 3 4 5 6 Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.

1 2 3 4 5 6 Most people just don't know what's good for them.

1 2 3 4 5 6 The United States and Russia have just about nothing in common.

Name _____

This is a study of what people believe about a number of philosophic questions. The best answer to each statement is your personal belief. Many different and opposing points of view are presented here. You will find yourself believing some of the statements, not believing some, and uncertain about others. Whether you believe or do not believe any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write 1, 2, 3, or 4, 5, 6, depending on how you feel in each case.

1: I agree very much.
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 Man doesn't have a "spirit" which is separable from his body and the material world.

1 2 3 4 5 6 There is no spiritual realm which lies beyond man's experience in the natural world.

1 2 3 4 5 6 The mind is a group of "contents" which come from having certain material presented to it.

1 2 3 4 5 6 The mind possesses faculties for remembering, imagining, reasoning, willing, and so forth, which are developed by exercise and discipline.

1 2 3 4 5 6 The mind is formed from without, as one molds and shapes a piece of clay.

1 2 3 4 5 6 "Mind" is purely intellectual and cognitive; bodily activity is an irrelevant and intruding physical factor.

1 2 3 4 5 6 What is right and good at one time and place may not be right and good for all times and places.

1 2 3 4 5 6 All "truths" are relative.

1 2 3 4 5 6 Nothing is or can be unchanging, absolutely certain.

1 2 3 4 5 6 A statement of fact can be both <u>both</u> true <u>and</u> untrue depending on the standpoints and conditions of the observations.

Name _____

1: I agree very much.
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 Man's choices are good only if they prove successful in helping him live with some degree of security and equilibrium in the world of nature.

1 2 3 4 5 6 You can never prove that any fact is unconditionally true.

1 2 3 4 5 6 There can be no final, absolute ends to which all men aspire.

1 2 3 4 5 6 What something may be when totally independent of any observer or frame of reference is a scientifically meaningless question.'

1 2 3 4 5 6 The nature of a thing is detemmined by what it does, or can be used for; it is what it becomes with intelligent use.

1 2 3 4 5 6 Reaching a condition in which there were no more problems would be the ideal life.

1 2 3 4 5 6 To know something is to know the inner nature of things, i.e., as they really are prior to investigation.

1 2 3 4 5 6 What is morally right and wrong should be decided on the basis of scientific inquiry.

1 2 3 4 5 6 Questions of value and moral judgment ought to be open to experimentation.

1 2 3 4 5 6 Questions of values and morals should be taken out of their traditional supernatural setting and put in a naturalistic setting.

1 2 3 4 5 6 The use of the scientific method can be extended to solve the problems of men in the area of values and moral judgments.

1 2 3 4 5 6 What is morally right and wrong ought to be decided on warranted evidence--the findings of empirical science.

Name _____

1: I agree very much.
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 The ends and laws which should regulate human conduct have been determined by the superior intelligence of an ultimate Being.

1 2 3 4 5 6 Man's primitive impulses are neither good nor evil, but become one or the other according to the objects for which they are employed.

1 2 3 4 5 6 The mind turns outward to truth; the emotions turn inward to considerations of personal advantage and loss.

1 2 3 4 5 6 The senses and muscles are merely external inlets and outlets of the mind.

1 2 3 4 5 6 In the absence of a moral code supported by absolute authority, bodily appetite and passion overpowers intelligence.

1 2 3 4 5 6 Change is a basic characteristic of nature, and man has some measure of control over this change by using his intelligence.

1 2 3 4 5 6 Man is capable of managing his own destiny in an understandable and predictable natural world.

1 2 3 4 5 6 Man's destiny is in the hands of a supernatural power.

1 2 3 4 5 6 Man's destiny is determined by circumstances of nature which are beyond his control.

1 2 3 4 5 6 Knowledge is artificial and ineffective in the degree in which it is merely presented as truth to be acquired and possessed for its own sake.'

1 2 3 4 5 6 Practice is subordinate to knowledge, merely a means to it.

1 2 3 4 5 6 Learning is an application of mental powers to things to be known.

1 2 3 4 5 6 Truth exists ready-made somewhere; the task of the scholar is to find it.

Name _____

1: I agree very much.
2: I agree on the whole.
3: I agree a little.
4: I disagree a little.
5: I disagree on the whole.
6: I disagree very much.

1 2 3 4 5 6 Knowledge is truth to be accepted, held, and treasured for its own sake.

1 2 3 4 5 6 Learning is the sum of impressions made on the mind as a result of presentation of the material to be known.

1 2 3 4 5 6 Knowledge is the result of theoretical insight on the part of scholars.

1 2 3 4 5 6 Knowledge is the sum total of what is known, as that is handed down by books and learned men.

1 2 3 4 5 6 Man gains knowledge by having things impressed upon his mind.

VITA

Name: Beatrice Mayes

Address: 100 Memorial Parkway, New Brunswick,
New Jersey 08901

Telephone: 201-545-9740

Educational Background:

High School:	Erasmus Hall High School Brooklyn, New York
College:	St. Lawrence University Canton, New York B.S.
	Rutgers University New Brunswick, New Jersey Ed.M., June, 1966

Professional Experience:

1963-1964	Sixth Grade Teacher Lincoln School New Brunswick, New Jersey
1964-1969	Remedial Reading Teacher, Sixth Grade Teacher, Third Grade Teacher Franklin Township Public Schools Somerset, New Jersey
1969-1970	Reading Instructor Special Entrance Program Rutgers University Newark, New Jersey
1970-1971	Coordinator, Literature Search in Reading, Rutgers University (Project 2 of the Targeted Research and Development Program in Reading, USOE contract)
1971-1972	Instructor, Communication Science Newark State College Union, New Jersey